CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.05/KRIDL/STEEL/2014-15 06.06.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
Agency	:	**Technical Manager,** KRIDL, Bangalore.
Name of the work	:	Improvements to Roads and Drains from Railway Level Crossing to Jakkur Tank in Ward No.05, BBMP, Bangalore.
Reference	:	AEE/BTP/377/2014-15 Dated: 03.06.2014
Date of Test	:	06.06.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm²	Tensile strength (Ultimate stress) N/mm²	Elongation percent gauge length		
1	12	0.89	515	558	13.50	O.K	O.K

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported Within 15 days from the date of testing..

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Job No.: CTCE/BBMP/W.No.05/KRIDL/CUBE/2014-15

08.07.2014

TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL Bangalore.
Name of the work	: Improvements to Roads and Drains from Railway Level Crossing to Jakkur Tank in Ward No.05, BBMP, Bangalore.
Reference	: AEE/BTP/377/2014-15 Dated: 03.06.2014
Sample ID	: Drain Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	10.06.2014	08.07.2014	8.157	493.5	21.93
2	10.06.2014	08.07.2014	8.265	502.7	22.34
3	10.06.2014	08.07.2014	8.394	515.8	22.92

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Job No.: CTCE/BBMP/W.No.05/KRIDL/WMM/Gradation/2014-15

20.06.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL Bangalore.

Name of Work : Improvements to Roads and Drains from Railway Level Crossing to Jakkur Tank in Ward No.05, BBMP, Bangalore.

Reference : AEE/BTP/377/2014-15 Dated: 03.06.2014

Date of Testing : 20.06.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **25900**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	1010	1010	3.9	96.1	95-100
22.4	6650	7660	29.6	70.4	60-80
11.2	4875	12535	48.4	51.6	40-60
4.75	5160	17695	68.3	31.7	25-40
2.36	3280	20975	81.0	19.0	15-30
0.600	2370	23345	90.1	9.9	8-22
0.075	2260	25605	98.9	1.1	0-8

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Job No.: CTCE/BBMP/W.No.05/KRIDL/SDBC/Bitumen/2014-15 11.07.2014

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

AASHTO T 164 & AASHTO T 30

CLIENT	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
AGENCY	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	Improvements to Roads and Drains from Railway Level Crossing to Jakkur Tank in Ward No.05, BBMP, Bangalore.
REFERENCE	AEE/BTP/377/2014-15 Dated: 03.06.2014
SAMPLE I/D	Roads and Drains from Railway Level Crossing to Jakkur Tank in Ward No.05
DATE OF TESTING	11.07.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	474.5	474.5
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	25.5	25.50
7. Bitumen content in %	5.10	5.10
8. Average	5.10	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	27.25	5.74	5.74	94.26	90-100
4.75	253.4	53.40	59.15	40.85	35-51
2.36	58.67	12.36	71.51	28.49	24-39
1.18	34.26	7.22	78.73	21.27	15-30
0.3	24.96	5.26	83.99	16.01	9-19
0.075	42.18	8.89	92.88	7.12	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	35.63	7.51	7.51	92.49	90-100
4.75	246.3	51.91	59.42	40.58	35-51
2.36	52.64	11.09	70.51	29.49	24-39
1.18	45.98	9.69	80.20	19.80	15-30
0.3	31.52	6.64	86.84	13.16	9-19
0.075	37.54	7.91	94.75	5.25	3-8

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